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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,653	12/08/2008	Christopher Henry Such	0446-0188PUS1	2764

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EXAMINER

MESH, GENNADIY

ART UNIT	PAPER NUMBER
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1763

NOTIFICATION DATE	DELIVERY MODE
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02/17/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/587,653	Applicant(s) SUCH ET AL.	
	Examiner GENNADIY MESH	Art Unit 1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 01 February 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-3,5-9,12,15-18,20,21,23,24,27,30,31,34-37,39-41 and 43-52 is/are pending in the application.
- 4a) Of the above claim(s) 1-3,5,6,8,9,12,15,37,39-41 and 43-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-18,20-21, 23-24,27,30-31 and 34-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/03/2008,11/28/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1.1. Applicant's election with traverse of Group II, Claims 16-18, 20-21, 23-24, 27, 30-31 and 34-36 in the reply filed on February 1, 2011 is acknowledged.

Applicant also elected specific peroxides and aromatic amine as:

- 1) for diaroyl peroxide - dibenzoyl peroxide;
- 2) for dialkanoyl peroxide - dilauroyl peroxide; and
- 3) for aromatic amine of formula (I) - N,N-bis(2-hydroxyethyl)-p-toluidine

and indicated that Claims 16-18, 20-21, 23-24, 27, 30-31 and 34-36 are read on elected specie.

1.2. The traversal is on the ground(s) that Ritchie et al. (US 6,533,967) combined with Kamath et al. (US 4,129,703) fails to disclosed, teach or suggested technical feature as processes for the preparation of solid polyesters in presence of diacyl peroxides and aromatic amine claimed by Applicant.

This is not found persuasive because for following reasons.

As it was explained in preceding Office action mailed on November 2, 2010, Ritchie disclosed use of substantially same initiating system, comprising combination of particularly preferable (identical to elected specie) amine as N,N-bis(2-hydroxyethyl)-p-toluidine (see column 3, lines 1-4) and benzoyl peroxide exemplified in working Examples (see column 10, lines 19-20) - identical to elected specie, but silent regarding use of more than one peroxide in process of preparation of solid polyester granules.

However, Kamath teaches, that free-radical polymerization of vinyl monomer (styrene) can be conducted in presence of at least two peroxides, wherein first peroxide effective at low temperature and second peroxide effective at higher temperature in order to reduce polymerization time (see abstract, column 1, lines 23- 58). Therefore, it would be obvious to use more than one peroxide in process disclosed by Ritchie as it taught by Kamath.

Regarding limitation of Claim1 as "wherein the combination of diacyl peroxides comprises diaroyl peroxide and dialkanoyl peroxide having a diaroyl peroxide to dialkanoyl peroxide mole ratio that is equal to or greater than 1:1" note, Kamath teaches that proportion of high to low temperature initiators (peroxides) can be 1:1 - see column 3, lines 44.

Regarding Applicant's argument that Kamath required presence of specific peroxide note, that language of Claim 1 or 16 does not exclude presence of any additional components, including peroxide or combination of peroxides as taught by Kamath.

At least for reasons above Applicant's arguments were found unpersuasive. Therefore, The Requirement is still deemed proper and is therefore made FINAL.

1.3. Thus, Claims 1-3, 5-6, 8-9, 12, 15, 37, 39-41 and 43-52 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim.

Claims 16-18, 20-21, 23-24, 27, 30-31 and 34-36 will be examine on the merits.

Abstract

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it has less 50 words.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16-18, 20, 27, 30 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchie et al. (US 6,533,967).

Regarding Claims 16-18, 20, 30 and 34-36 Ritchie disclosed process for preparing solid polyester granules, comprising product of reaction of unsaturated polyester with styrene (see abstract and column 4, lines 58 - 63), wherein

Art Unit: 1763

initiating system comprises particularly preferable (and identical to elected specie) amine as N,N-bis(2-hydroxyethyl)-p-toluidine (see column 3, lines 1-4) and benzoyl peroxide exemplified in working Examples (see column 10, lines 19-20).

Note, that Ritchie is silent regarding use of more than one peroxide in process of preparation of solid polyester granules.

However, limitation of Claim 16 related to presence and amount of second peroxide as "having a diaroyl peroxide to dialkanoyl peroxide mole ratio that is equal to or greater than 1:1" can be satisfied by ratio as 100000:1 or even higher. In this case, it would be expected that presence of very low amount of second peroxide according this ratio, will not bring any changes to process disclosed by Ritchie. For this reason, it would be obvious to one of ordinary skill use very low amount of second peroxide due to predictability of outcome of the process disclosed by Ritchie.

Regarding Claim 27 see Ritchie example 1 (item C for peroxide and item E for amine).

Regarding Claims 34 see Ritchie column 5, lines 32-41.

Regarding Claim 35 see Ritchie column 6, lines 27 - 32.

Regarding Claim 36 see Ritchie column 6, lines 54 - 57.

5. Claims 16-18, 20-21, 23-24, 27, 30-31 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchie et al. (US 6,533,967) in view of Papastavros et al. (US 5,056,996 - reference cited by Applicant).

Discussion with respect to Ritchie (see paragraph 4 above) incorporated herein by reference.

As it was discussed above, Ritchie disclose substantially same process for preparing solid polyester granules, comprising product of reaction of unsaturated polyester with styrene, wherein initiating system comprising specific aromatic amine and dibenzoyl peroxide, but is silent regarding presence second peroxide, specifically dilauroyl peroxide at mole ratio as claimed by Applicant.

However, Papastavros teaches polymerization process of liquid vinyl monomers and unsaturated polyesters in presence of initiators and catalysts system (see column 7, lines 28-48) comprising two peroxides with different 10 hour half life temperature and specifically pointing out that dilauroyl peroxide can be used as lower temperature initiator and dibenzoyl peroxide can be used as higher temperature initiator (see column 9, lines 1-8). Papastavros pointing out that use of two peroxides with different initiation temperature significantly more efficient than use of same concentration of one peroxide and will not lead to excessive generation of free radicals and associate with this process excessive exotherm. (see column 8, lines 18-68). Note that peroxides can be used at molar ratio 1:1 (see Example 1).

Therefore, it would be obvious to one of ordinary skill in the art to add second peroxide in molar ratio 1:1 per teaching of Papastavros to initiating system used in process disclosed by Ritchie in order to obtain conduct process efficiently and without excessive exotherm.

Regarding Claim 27 see Ritchie example 1 (item C for peroxide and item E for amine).

Regarding Claims 34 see Ritchie column 5, lines 32-41.

Regarding Claim 35 see Ritchie column 6, lines 27-32.

Regarding Claim 36 see Ritchie column 6, lines 54-57.

Regarding Claim 31 note, that because Ritchie combined with Papastavros disclosed substantially same process, than it would be expected that resultant polyester granule would have substantially same properties, including same level of residual styrene.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GENNADIY MESH whose telephone number is (571)272-2901. The examiner can normally be reached on 10 a.m - 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272 1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1763

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Milton I. Cano/
Supervisory Patent Examiner, Art Unit 1763

Gennadiy Mesh
Examiner
Art Unit 1763

/GM/